

tional objectives. Finally, the last chapter discusses the practical implications of the various taxonomies to the differing forms of cognitive education. It also offers a four-category framework (information gathering, basic understanding, productive thinking and reflective thinking) that would be of particular value to practitioners. After all, “the goals of thinking and learning may be concerned with information-gathering, with building understanding, with thinking that generates productive outcomes, or with dynamic combinations of all three” (p.7).

For teachers, clinicians and psychotherapists, all tempted by repetitive, habitual or ideological ways, classical or recent, this book is a fabulous source of new knowledge that can only foster their critical thinking over how they teach and how they heal. As an example of a “self-rectifying” exercise, those who are believers of the universal healing powers attributed to Cognitive Behavioral Therapy will learn regarding instruction in cognition that “not many teachers are enthused by what are widely regarded as simplistic behaviorist models... The behavioral objectives movement has been particularly influential in special education... and in main stream practice there has also been a trend towards setting and assessing precise learning goals and targets. The sterile and mechanistic nature of such approaches, however, has resulted in renewed interest in cognitive processes....” (p.25). Any person having such an interest should get this book and place it beside other long lasting reference works.

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The Mindful Brain: Reflection And Attunement In The Cultivation Of Well-Being

Siegel, D. J. W. W. Norton & Company, New York, 2007, 387 pp., CA \$33.50.

Can a scholarly book be read at the bedside? This one can be.

Initially, I chose to review this book because of its attractive title, “The Mindful Brain” and the implication that it can be used for the cultivation of well being. Precisely, this is the business we are in.

As I got started, I realized that this seemingly easy to read book is studded with complex

information that makes one’s mind to ponder over thoughtful questions. Answers are given in the book but again are deceptively hidden behind simplistic screen.

I have read other books by Daniel Siegel and I was very surprised by the change of his writing style, which is friendly, yet conveys important scientific information authoritatively. In the preface, his first sentence conveys this spirit of collaborative journey. “Welcome to a journey into the heart of our lives” (page xiii), and indeed, readers are amply supported in this journey through personal anecdotes, metacognitive observations and new scientific knowledge-base required to understand the mindful brain.

In this four part, fourteen chapter book, the definitions of mindful brain are interestingly laid out. One of them emphasized three points: awareness in the present moment, awareness through paying attention on purpose, and being non-judgmental to the unfolding of experiences (position taken by Jon Kabat-Zinn well summarized on page 10).

But Siegel goes further than these commonly accepted definitions. He describes for us what he calls COAL, acronym for curiosity, openness, acceptance, and love. This is just a starting point for acronyms. There are many more to follow. I actually felt crowded by these acronyms, and in some places they make the text more complicated than need be. Mindful awareness practices (MAPs), COAL, SIFT (sensations, images, feelings, and thoughts), MBCT (Mindfulness Based Cognitive Therapy), SOCK (sensation, observation, concept, and knowing), to name the few.

The chapter on “Brain Basics” seemed too basic but it could not be ignored. I had to remind myself that the book is probably written for a mixed audience, and for the non-physician community this chapter could be providing an essential basic tool to understand functioning of the brain and connections with mindfulness.

I am going to skip next few chapters where Siegel describes his own authentic experiments with mindfulness practices. This self-disclosure adds the friendly quality that I initially appreciated but it did not tie-in that well with the rest of the discussion.

This model for the functioning of the mind, he describes as the wheel of awareness. It comprises of the rim, spokes, and hub. The sectors

of the rim are divided into: first five (outer world), sixth (body), seventh (mind), and eighth (relationships). The spokes in this model are intentional focus of attention and the hub has the capacity to keep track of the target of attention.

Although the model is nicely pictorially represented, I wondered why I was getting the static sense of awareness from this model. The concepts of executive function, self regulation and attunement are explained on the basis of this model albeit in an inferential manner. The 'hub' of this model is ascribed this function of regulating sensory flow, the feelings, even sense of our own self. This discussion now leads to how we could harness these complex phenomena by being mindful. What follows is an elegant description of how mind can govern the executive functions and self regulation. This sense of static status, is probably a feeling of disjointed sense between the various descriptions of the components of the model, and it is entirely possible that readers have to achieve a particular mental status to grasp all the written and implied connections.

The essence of the next chapter (chapter seven) is to offer the key to unlock the art of mindfulness. In author's words, "Letting go of such top-down influences is the art of mindful awareness" (Page 160). He has defined top down influences as to the way some of the higher processes can take over the lower or perceptual processes in the moment. Siegel emphasizes that it is not just sensing the moment but also about not being judgemental. I absolutely loved one aspect of this discussion...he described how words can be good cognitive companions and how they can also entrap us. "If ...we see them as real, their top-down influences on our lives can be devastating" (page 161).

Now get ready for the best easy-to-understand description of the mirror neurons, attention to intention, and internal attunement. Even if I have said elsewhere that readers can get lost in the jungle of acronyms, this chapter surpasses all those intricacies and conveys the connection between mindfulness and mirror neurons. A rather simplistic description of the brain as a social organ and an anticipatory machine follows.

In chapter nine, we are given balanced perspectives on the concept of integration-inter-

personal relationships, attachment –narrative, and coherence-cohesion. Some clarification is essential, as for example, the author tells us that coherence and cohesion are phenomenally different. A "cohesive state" is created as a set of equations that rigidly defines the in and out group status of any variable...." (page 207). Coherence on the other hand was explained as having many embedded variables that influence the equation itself. How does this fit into mindfulness? The triangle of wellness is said to be composed of neural integration, a coherent mind, and empathic relationships. Mindfulness will influence dynamic interaction between the neural, mind and relational aspects (page 208).

The next two chapters teach us the aspects of flexibility of thinking, and reflective thinking. There is a good discussion on recent findings of how attuned interactions induce the neuroplastic changes in the offspring (Meaney, 2001).

Part IV focuses on the reflections on the mindful brain. This part has three clinically relevant chapters. Chapter twelve introduces the Fourth "R" in the education of the mind. The first three Rs are reading, writing and 'rithmetic. The fourth one is reflection, and is essential to developing mindfulness. Siegel describes the neural terms of developing this fourth R as the indirect training for the development of the prefrontal cortex. He describes in detail how domains of neural integration can be promoted in psychotherapy. The horizontal integration is described as linking the two sides of the nervous system, which are logical and emotional/visceral representations. The vertical integration helps us to disentangle past unresolved losses and experiences that separate us from experiencing the vitality of present senses. Memory integration has to do with interwoven connections between the implicit and explicit memory. But narrative integration discussion captured my full attention. Siegel particularly excels here, and states that the creation of a narrative of our own life involves a "witnessing self" (page 309).

There are three additional ideas of integration that follow, namely the state integration, temporal integration and interpersonal integration. State integration is accepting our different states of being, but the temporal integration

was difficult to grasp. Essentially what I got out of this is how to guide ourselves and our patients on existential issues such as uncertainty, impermanence and death. I wished Siegel would have expanded on this discussion which is quite crucial for psychotherapeutic interventions. Interpersonal integration was not what I thought. Siegel sees it as "a vital way in which our brain's hardwiring to connect enables us to feel grounded in the world" (page 317). The next level of integration, I did not know even existed. The transpirational integration is said to open our minds to another dimension of perception, a beautiful new way of thinking of opening the mind to infinite possibilities.

The author has provided a useful glossary and appendix that deals with the resources to work on mindfulness. Neural notes are added as a help to understand middle prefrontal functions. My earlier comment on how basic the brain functions chapter was has to be now balanced with this addition.

Overall, the author convinced readers like me that mindfulness has a place in the personal and professional domains. It is here to stay, and it has always been with us, but never got the scholarly status that it enjoys currently.

In my view, it is a must reading for all therapists who practice psychotherapy and use the vehicle of cognitive therapy for their patients.

My rating for the content is 8/10, usefulness 8/10, but for the flow of the material 5/10.

Happy reading.

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Reference

Meaney, M. J. (2001). Maternal care, gene expression, and the transmission of individual differences in stress reactivity across generations. *Annual Review of Neuroscience*, 24, 1161-1192.

Toward a New Diagnostic System for Child Psychopathology: Moving Beyond the DSM

Jensen, P. S., Knapp, P. & Mrazek, D. A. Guilford Press: New York, 2006, 194 pp., US \$30.00.

This book is the result of extensive discussions among its editors and authors on the

future of our present diagnostic system for psychiatric disorders in children and adolescents. The editors formulate their ideas in six of the 10 chapters in the book while the rest are authored by invited distinguished members of the US academic child and adolescent psychiatry and psychology establishment (M. Kruesi, C. Pfeffer, D. Pine, J. Schowalter, T. Shapiro, L. Steinberg and P. Tanguay).

The overriding theme of this book is the conceptualization of psychiatric disorders using an evolutionary model as it applies to adaptive/maladaptive symptoms in conjunction with contemporary structural neuro-developmental and neuro-cognitive findings. The authors hope in this way to explain the almost daunting complexity of many symptoms and behaviours, e.g., in reflecting on aggression or post traumatic stress, we make a diagnosis without regarding their potential survival value and cultural meaning.

Specifically, they remind us that behavioural changes via genetic mutations take thousands of years, highlighting the powerful effect the environment has had in creating modern man. Many of our basic brain structures developed very long ago and retain behavioural expressions that can best be understood within a historical or evolutionary context.

Examples would be the fact that ADHD or Conduct Disorders have not disappeared spontaneously despite their commonly adverse effects on our society. Their incidence is also higher than one would expect to see in a spurious genetic mutation. This led the group to look at these (and other) conditions in terms of their possible value to increase the chances of survival in the past and to use this analysis as a guide for the diagnosis and treatment of these conditions in the future. For example, Jensen and Mrazek in a chapter on ADHD speculate that in the distant past there were societies where food and other resources were scarce, requiring individuals who were active in their search for resources and able to shift their attention easily to spot them quickly. In such groups ADHD would be a significant asset for the survival of the group. A sad affect or depression, likewise, could be seen as a potentially useful response to neglect following the loss of a family member, as it brings the affected individual to the attention of the group